

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A Laser Scanning Microscope with a non-descanned detection and/or observation beam path, illumination and detection beam paths and a direction of detection, the Laser Scanning Microscope comprising:

wherein a beam splitter is provided positioned for separation of the illumination and detection beam paths;

path and in the direction of the detection- at least one optical arrangement in the direction of detection for regular transmission of the a detected light; and

detected light is provided, whereby a second optical arrangement between the beam splitter and the optical arrangement, an additional optical arrangement is provided for reducing the diameter of the a bundle of the a beam to be imaged.

2. (Currently Amended) The Laser Scanning Microscope according to claim 1, whereby the additional
wherein the second optical arrangement is a convex lens.

3. (Currently Amended) The Laser Scanning Microscope according to claim 1, whereby the additional
wherein the second optical arrangement is embodied as a diffractive optical element (DOE).

4. (Currently Amended) The Laser Scanning Microscope according to claim 1, 2 or 3, whereby the additional
wherein the beam splitter is contained within a housing, the second optical

arrangement is being mounted immediately at the beam splitter housing in the direction of the detection.

5. (Currently Amended) The Laser Scanning Microscope according to one of the claims 1-4,
whereby the additional claim 4, wherein the second optical arrangement is integrated in the housing of the beam splitter.

6. (Currently Amended) The Laser Scanning Microscope according to one of the claims 1-5,
whereby the additional claim 1, wherein the second optical arrangement is replaceable or can be plugged in.

7. (Currently Amended) The Laser Scanning Microscope according to one of the claims 1-6,
whereby claim 1, wherein a second lens is provided on an another deflecting element or is integrated in the latter, deflecting element, singly or in combination with the additional second element at the beam splitter.

8. (Currently Amended) The Laser Scanning Microscope according to one of the claims 1-7,
with an embodiment comprising claim 1, wherein the second optical arrangement comprises a tilted mirror in an deflecting element in the form of a convex or concave mirror.